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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/525,588

10/07/2005

Hermann Scholz

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EXAMINER

ANDERSON, AMBER R

ART UNIT

PAPER NUMBER

3765

MAIL DATE

DELIVERY MODE

11/13/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/525,588	Applicant(s) SCHOLZ, HERMANN	
	Examiner AMBER R. ANDERSON	Art Unit 3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 1-22 and 37-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/23/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is in response to RCE filed on June 6, 2008 in which claims 1-16 are presented for examination. Claims 1-5 have not been amended and Claims 6-16 are new.

Status of Claims

Claims 1-16 are pending of which Claims 1, 7, and 12 are in independent form.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: all reference numbers have been omitted from the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 23-36 are objected to because of the following informalities: The examiner notes that the use of reference numerals in the claims is not improper. However, reference numerals cannot be used as a substitute for clear recitation of structure. The examiner requests that the applicant delete all reference numerals to avoid confusion. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 23-29, 31, 35, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Reed (USPN 3,349,396).**

Regarding Claim 23, Reed discloses a garment (26) composed of an infrared-reflecting material (Fig. 4), said infrared-reflecting material comprising at least one metallized water-vapor-permeable ply (33 & 34 where 33 is metallized and 34 can be cotton which is water-vapor-permeable) having a top surface (side closest to 31) and a bottom surface (34) and having at least one ply that is air permeable, drapable and

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convective and has a three-dimensionally transmissive structure (31 & 32), wherein the convective ply is disposed on one or more of the surfaces of the metallized ply (Fig. 4).

Regarding Claim 24, Reed discloses wherein the convective ply has a top surface and an air-permeable sheetlike structure (32, where this layer is made of a fabric and is inherently air-permeable to a degree) is disposed on this surface.

Regarding Claim 25, Reed discloses wherein the convective ply has a top surface and an air-permeable sheetlike structure (32, where this layer is made of a fabric and is inherently air-permeable to a degree) is disposed on this top surface.

Regarding Claim 26, Reed discloses an outer side and an inner side and wherein the top surface of the metallized ply faces the outer side of the convective ply is disposed atop the top surface which faces the outer side (Fig. 3 & 4).

Regarding Claim 27, Reed discloses wherein the convective ply is not less than 2 mm in thickness (Col. 5, lines 42-44).

Regarding Claim 28, Reed discloses wherein the convective ply has a structure that is riblike, honeycomblake, pimped, netlike, deflocked, foamike (Fig. 4; Col. 5, lines 34-38).

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Regarding Claim 29, Reed discloses wherein the convective ply comprises spaces (16) perpendicular to the one or more of the surfaces of the metallized ply (Fig. 4; Col. 5, lines 34-38).

Regarding Claim 31, Reed discloses wherein the convective ply is selected from the group of materials comprising polypropylene, polyester, polyurethane, polyethylene, polyamide, and combinations thereof (Col. 6, lines 57-60).

Regarding Claim 35, Reed discloses wherein the metallized ply comprises a metallized textile (Col. 6, lines 70-73).

Regarding Claim 36, Reed discloses wherein the metallized ply comprises a metallized membrane (Col. 7, lines 38-40).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (USPN 3,349,396) in view of Kim et al. (USPN 6,007,898).**

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Reed discloses a three-dimensional pimpled compressible material made of a film as the convective ply. Reed does not disclose the material being a knit. Kim et al. teaches a compressible material that is pimpled and can be made from wovens, knits, or non-wovens (Fig. 1; Col. 2, lines 61-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the convective ply out of a compressible pimpled knit as a simple substitution of one well known compressible three-dimensional material for another to yield the predictable result of providing a material that is compressible and pimpled.

6. Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (USPN 3,349,396).

Regarding Claims 32-34, Reed does not specifically disclose the air permeability in the z direction of the convective ply to be at least $100 \text{ l/m}^2\text{s}$ at a pressure of 10 Pa, the air permeability in the x and y direction of the convective ply to be at least $50 \text{ l/m}^2\text{s}$ at a pressure of 10 Pa, and the air permeability of the sheetlike structure to be at least $50 \text{ l/m}^2\text{s}$ at a pressure of 10 Pa. However, applicant's specification is silent as to the criticality of these values (i.e., why is $100 \text{ l/m}^2\text{s}$ at a pressure of 10 Pa in the z direction better than $50 \text{ l/m}^2\text{s}$ at a pressure of 10 Pa?).

Therefore, it would have been well known to one of ordinary skill in the art at the time the invention was made to have chosen values of air permeability that would suit the conditions in which the garment is to be worn, since it has been held that

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discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the design of the IR-reflecting material in Pusch et al. (USPN 4,467,005).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMBER R. ANDERSON whose telephone number is (571) 270-5281. The examiner can normally be reached on Mon-Thur, 8am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on (571) 272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/AMBER R ANDERSON/
Examiner, Art Unit 3765

November 5, 2008

/Gary L. Welch/
Supervisory Patent Examiner, Art Unit 3765